FCC Part 15 Antenna Gain Test Report

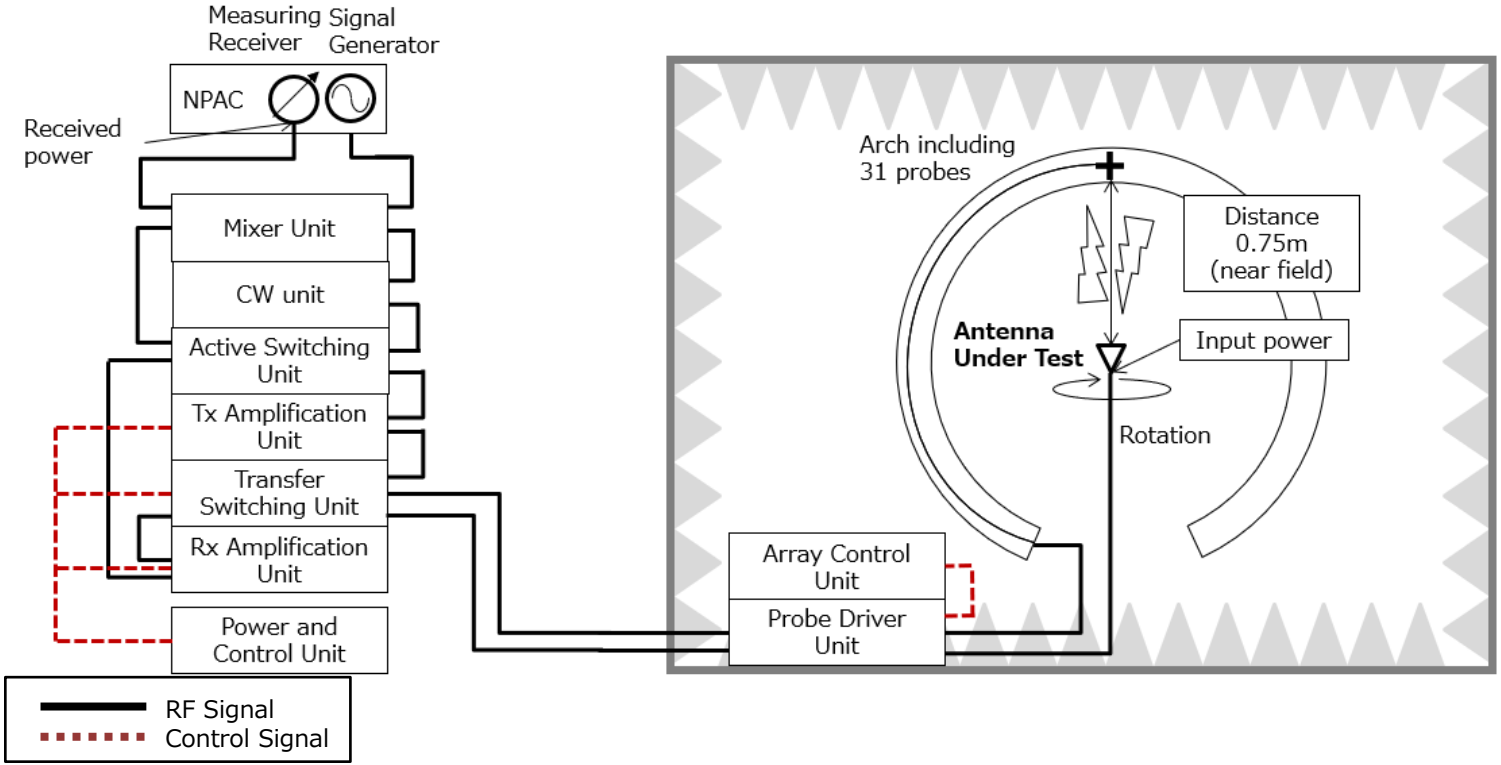
FCC ID:	VPYLB1VY
Client:	Murata Manufacturing Co., Ltd.
Type of Equipment:	Communication Module
Model No.:	Type1VY (* installed in Digital Camera 1VY012)
Date of Testing:	January 29, 2025
Date of Issue:	March 11, 2025

Sony Corporation

5-1-1 Minatomirai Nishi-ku Yokohama-shi Kanagawa, 220-8750, Japan

1. Measurement Procedure

- The antenna gain is measured in a fully anechoic chamber



2. Test Equipment and Measurement Software

Used	Equipment Description	Model No.	Serial No.	Manufacturer	Cal. Interval	Last Cal.	Remark
Y	Absorber Chamber	B83117-A1421-T161	21061	Albatross Projects	N/A	N/A	
Y	Multi-Probe Measurement System	SG32	1102611-0001	MVG	12 months	2024.08.05	
Y	Active Switching Unit	ASU	1101217-2569	MVG	12 month	2024.08.05	
N	Dual-Ridge Horn Antenna (0.6-6.0 GHz)	SH600	30	MVG	N/A	N/A	Reference Antenna
N	Sleeve-Dipole Antenna (0.69-0.8 GHz)	SD740	32	MVG	N/A	N/A	Reference Antenna
N	Sleeve-Dipole Antenna (0.865-0.93 GHz)	SD900	153	MVG	N/A	N/A	Reference Antenna
N	Radio Communication Tester	MT8821A	6261711661	ANRITSU	12 months	2022.06.20	For OTA

- The calibration is valid until the end of the expiration month.

Measurement Software

Used	Software Description	Model No.	Version	Manufacturer	Remark
Y	Automated Antenna and OTA Measurement Software Suite	MVG WaveStudio	24.2.6	MVG	
Y	Near-Field to Far-Field Transformation Software	MV-Sphere	3.4.4	MVG	

3. Antenna Under Test

Antenna 1

Antenna Model Name:	FPC-2035
Antenna Type:	Monopole
Input Impedance:	50 ohm

Antenna 2

Antenna Model Name:	WF-1008
Antenna Type:	Monopole
Input Impedance:	50 ohm

4. Antenna Gains

Antenna 1

Date of Testing: January 29, 2025

Tested Personnel: Hirotaka Sato

Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 1	2483.5	-4.08	* 2.4 GHz peak
	5200	-0.79	
	5300	-0.79	
	5500	-0.38	* 5 GHz peak
	5800	-1.96	

Antenna 2

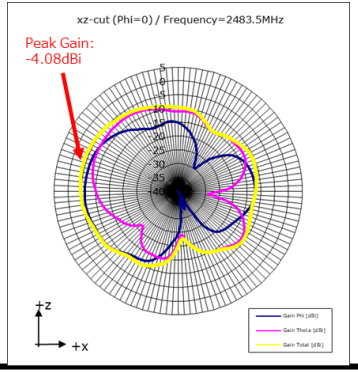
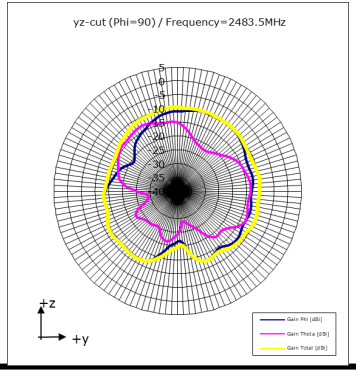
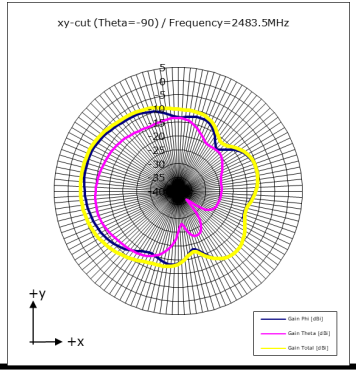
Date of Testing: January 29, 2025

Tested Personnel: Hirotaka Sato

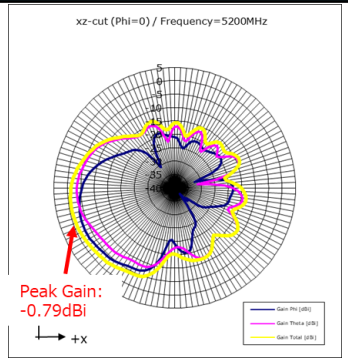
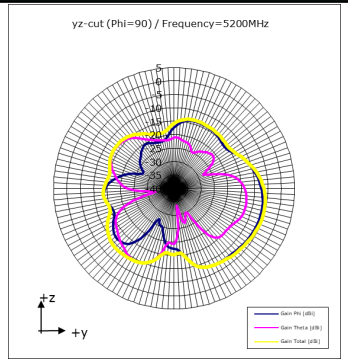
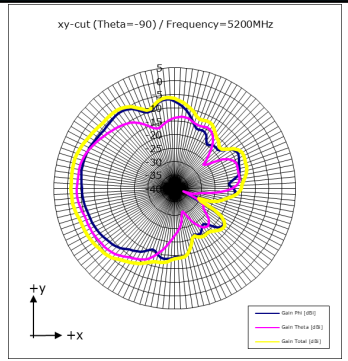
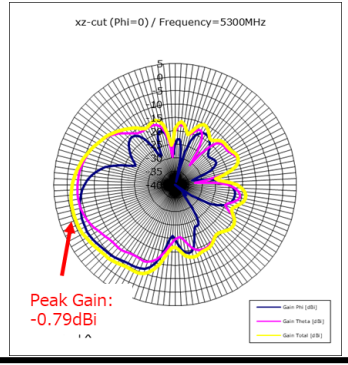
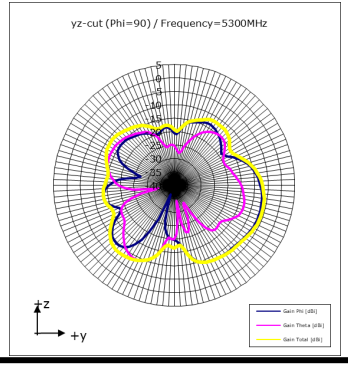
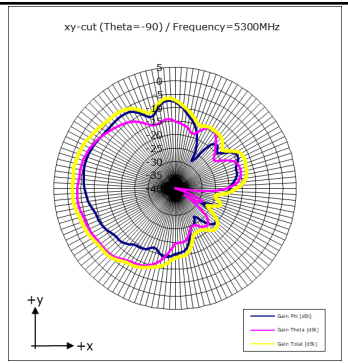
Antenna	Frequency (MHz)	Peak Gain (dBi)	Remark
Antenna 2	2440	-6.44	* 2.4 GHz peak
	5200	-0.80	
	5300	-2.02	
	5700	0.10	* 5 GHz peak
	5800	-0.21	

5. Antenna Directivity Plots

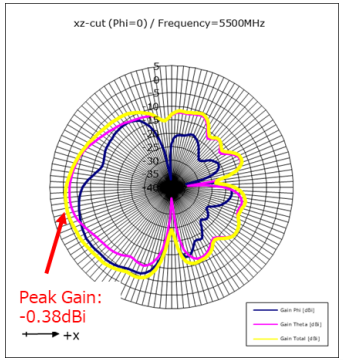
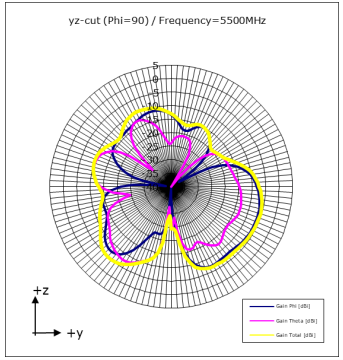
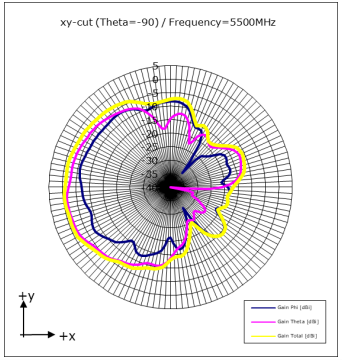
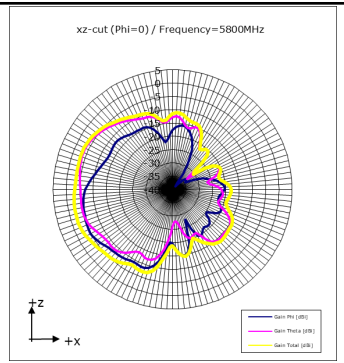
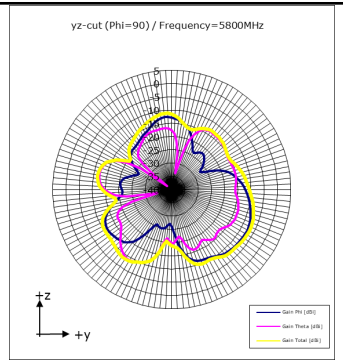
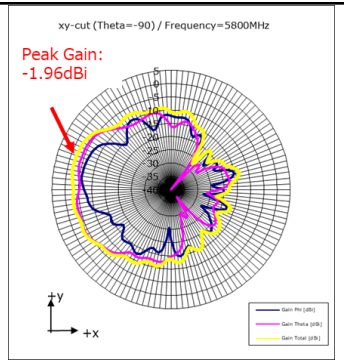
Antenna 1 (1/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
2.4 GHz			

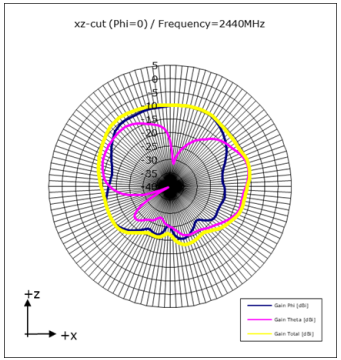
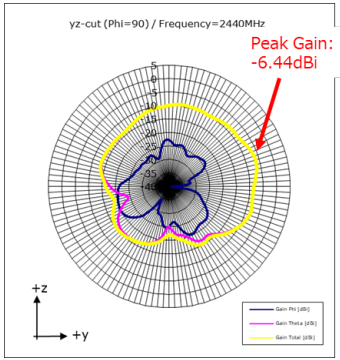
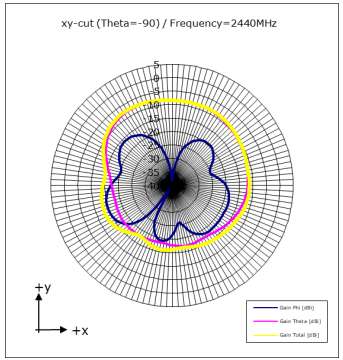
Antenna 1 (2/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)			
W53 (5.3 GHz)			

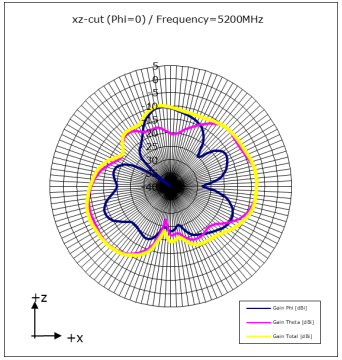
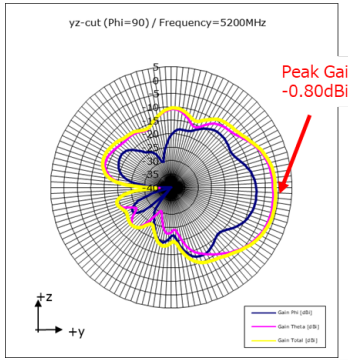
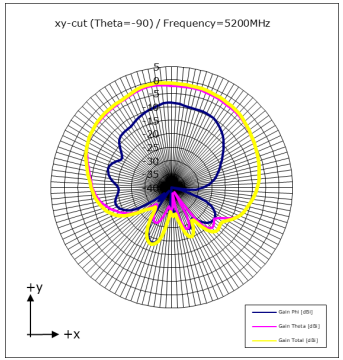
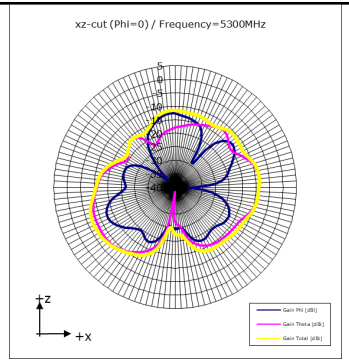
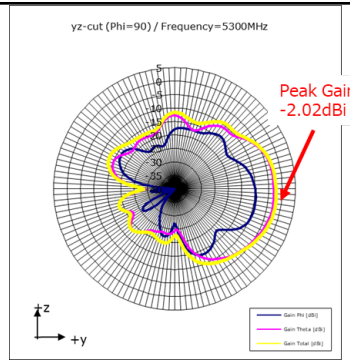
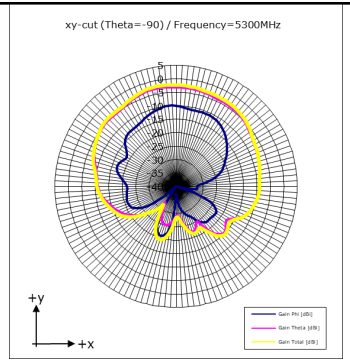
Antenna 1 (3/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.5 GHz)			
W58 (5.8 GHz)			

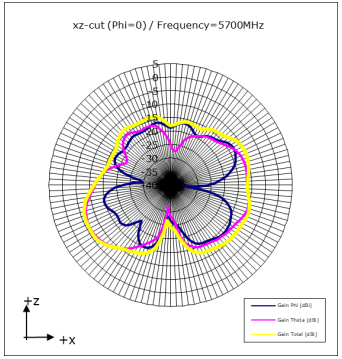
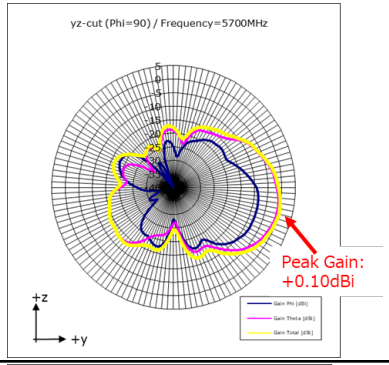
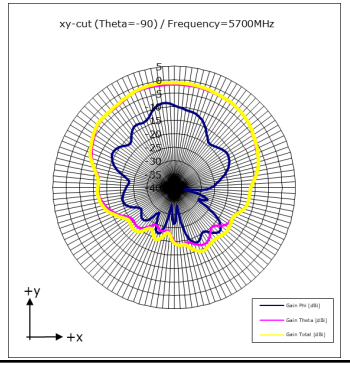
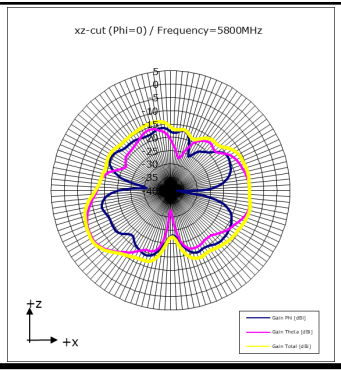
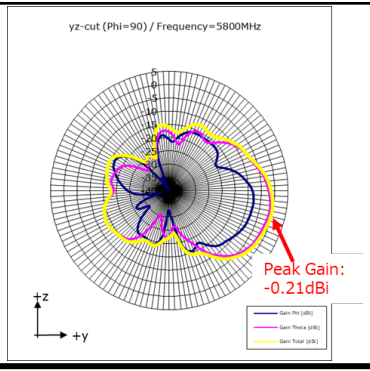
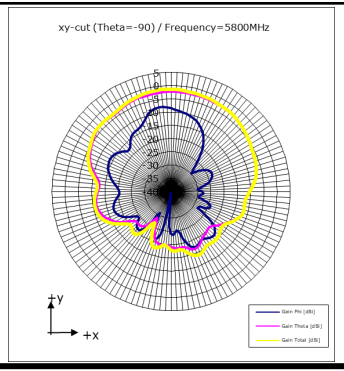
Antenna 2 (1/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
2.4 GHz			

Antenna 2 (2/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W52 (5.2 GHz)			
W53 (5.3 GHz)			

Antenna 2 (3/3)

Frequency Band	XZ-cut	YZ-cut	XY-cut
W56 (5.7 GHz)			
W58 (5.8 GHz)